

Notice of Allowability

Application No.

09/938,119

Examiner

Cicely Ware

Applicant(s)

ATLAS ET AL.

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 6/23/2006.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses a method for encoding a signal for storage or transmission. Prior art references show similar methods but fail to teach: **"a method for encoding a signal for storage or transmission, comprising the steps of: (a) implementing a two-dimensional transform of the signal, producing a transform matrix having modulation frequency as one dimension, wherein said one dimension is a spectral representation of a time variability of a spectra of the signal; (b) reducing a dynamic range of the signal; (c) quantizing and selecting coefficients included in the transform matrix", as in claim 1; "determining an inverse quantized mean spectral density using the quantized mean spectral density; deriving bit allocations from the inverse quantized mean spectral density using a perceptual model", as in claims 16, 22; "a method for perceptually ordering data within data packets that are sized as a function of either an available storage or an available data transmission bandwidth, comprising the steps of: (a) determining a mean spectral density function of the data for inclusion in the data packets. wherein the data packets are sized as a function of one of an available storage, and an 16 available data transmission bandwidth; (b) determining a magnitude matrix and a phase matrix for the data; (c) modeling the magnitude matrix; (d) quantizing the magnitude matrix and the phase matrix for use in the data packets", as in claim 29.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 571-272-3047. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cicely Ware

cqw
August 31, 2006

~~KHAI TRAN~~
~~PRIMARY EXAMINER~~


KHAI TRAN
PRIMARY EXAMINER

FIG. 1

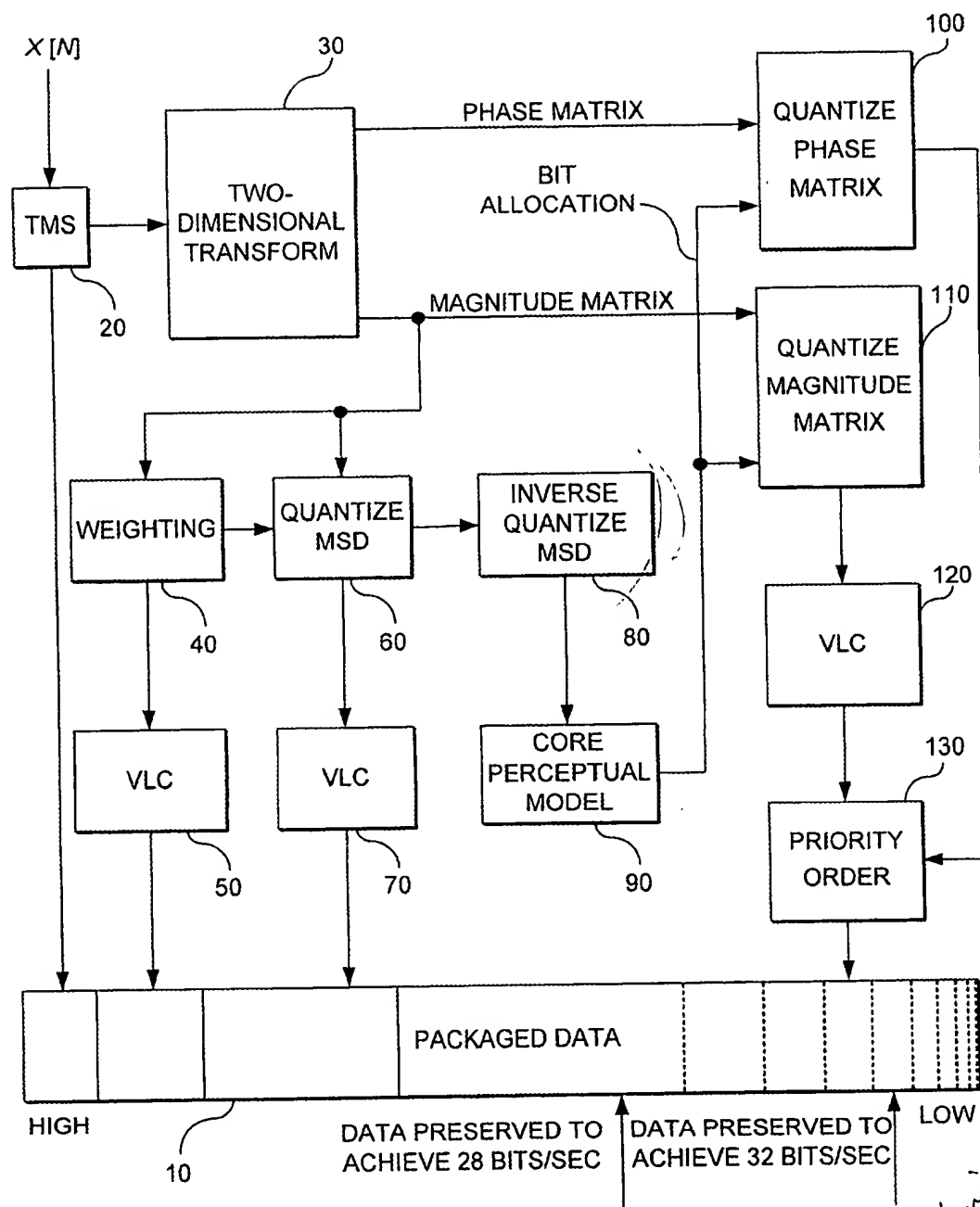


FIG. 1

MSD quantization
variable length coding
Huffman coding
MSD
LP transforms
mag of phase matrix
mag matrix

The diagram illustrates a two-stage signal processing system. The input signal $x[n]$ is processed by a **BASE TRANSFORM** block 154. The output of the base transform is a 2D grid 156 with frequency index K and time index m . The grid contains overlapping window functions $w_2[n]$ and is divided into blocks of size P and H . The grid is processed by a **SECOND TRANSFORM** block 160. The output of the second transform is a stack of **MAGNITUDE** 162 and **PHASE** 164 components, indexed by time l . The diagram includes various labels for windows (w_1 , w_2), transforms, and indices (n , m , K , l).

FIG. 2

09533119-082201
FOI200-670560

FREQUENCY (kHz)

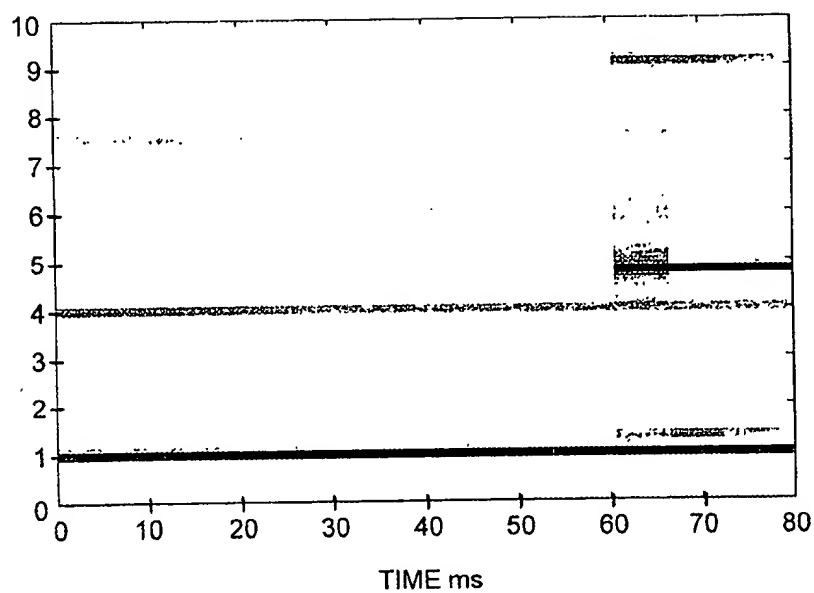


FIG. 3A

FREQUENCY (kHz)

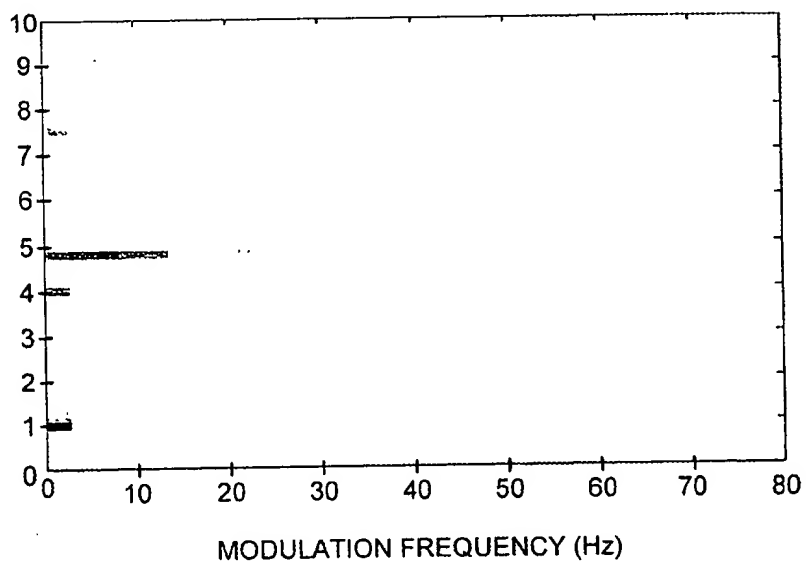


FIG. 3B

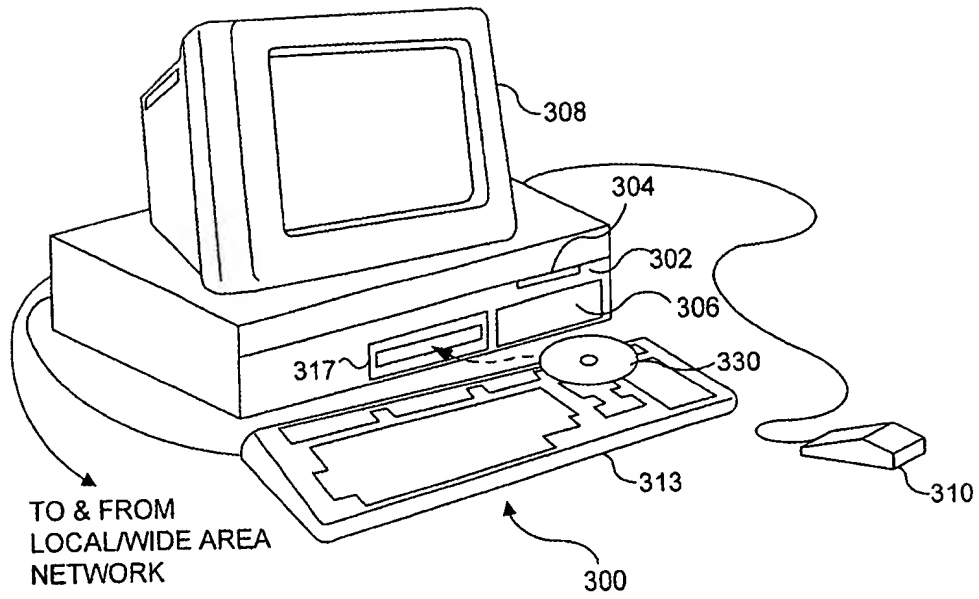


FIG. 7

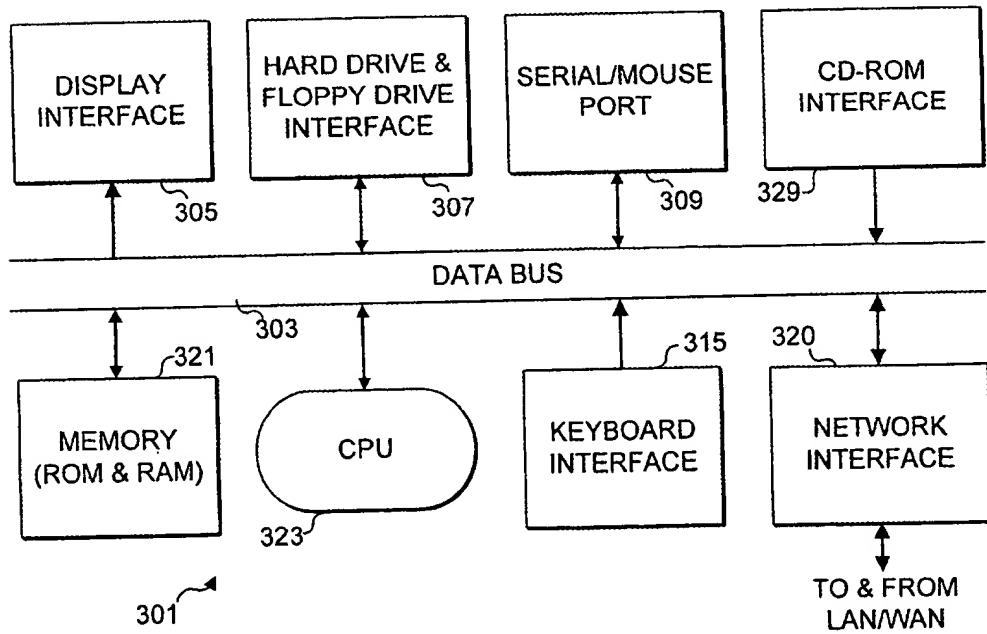


FIG. 8

09936119.06201

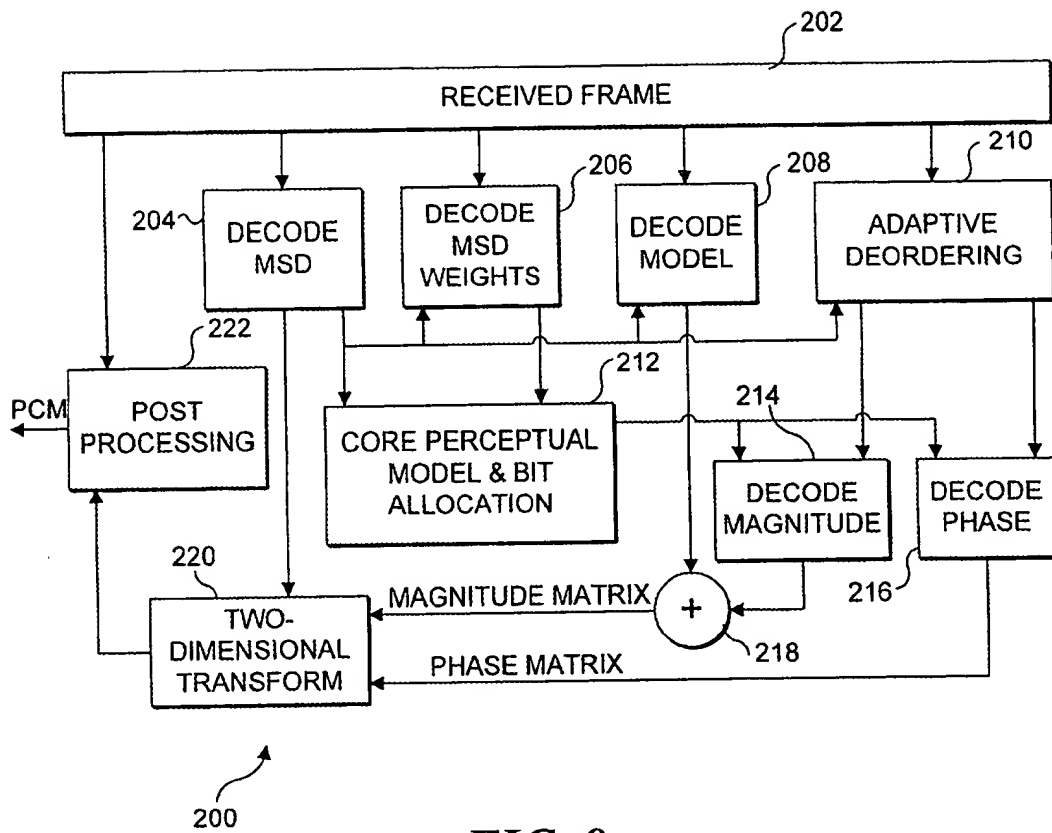


FIG. 9